

[Sorry for delay - I had to de-double-space this stuff]

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS News Bulletin 871 13TH AUGUST 1995

HUBBLE DISCOVERS NEW MOONS ORBITING SATURN

Astronomers using NASA's Hubble Space Telescope have announced the discovery of at least two, and possibly as many as four, new moons orbiting the giant planet Saturn. Their discovery is based upon images taken on May 22, 1995, when Saturn's rings were tilted edge-on to Earth.

Amanda S. Bosh, of Lowell Observatory, Flagstaff AZ, and Andrew S. Rivkin, also of Lowell Observatory, and the University of Arizona/Lunar and Planetary Laboratory, reported the discovery in the July 27 International Astronomical Union telegram (Circular No. 6192).

"We were excited to see new satellites in the Hubble pictures. This was not a primary goal of our observations, so we were quite surprised," said Bosh.

Two of the satellites seen by Hubble are in orbits similar to those of a pair of moons, called Atlas and Prometheus, discovered in 1980 by the Voyager 1 and 2 spacecraft.

"If these two satellites are the same seen by Voyager, then their orbital longitudes are different from what we expected," said Bosh.

Additional Hubble observation of Saturn, taken when the Earth again crosses the ring plane on Aug. 10, will provide more images that will be used to determine whether two of the four satellites detected by Hubble are truly new or not. If all four satellites are new, then the total number of known moons orbiting Saturn will grow from 18 to 22.

Two of the new moons (called S/1995 S1 and S2) lie inside Saturn's thin, eccentric "F" ring; a third moon (S3) lies just outside the F ring; and the fourth moon (S4) is 3,700 miles beyond the F ring. The moons are no bigger than about 45 miles across.

Hubble's sharp view is ideal for detecting faint new satellites that have previously gone unseen. The astronomers identified the new moons by first processing the Hubble pictures to remove a residual light from the ring edge, and noting the locations of Saturn's known satellites. After this was done, the researchers saw four objects moving from frame to frame that did not correspond with any of the known satellites.

"With the exception of S4, which we're having trouble finding in a few frames, we can follow the other three satellites for 10 hours as they go around the planet," said Bosh.

Saturn ring plane crossings happen only once every 15 years and historically have given astronomers an opportunity to discover new satellites that are normally lost in the glare of the planet's bright ring system. Astronomers discovered 13 of Saturn's moons during ring-plane crossings from 1655 to 1980. Other satellites were identified during the Voyager

spacecraft flybys of Saturn in the early 1980s.

After the upcoming Aug. 10 ring plane crossing, the next such event that will be visible from Earth will be in the year 2038. Saturn will be edge-on in 2009 and 2025, but will be too close to the Sun, as seen from Earth, to be observed.

PUBLIC ACCESS NASA SELECT SHUTTLE AUDIO (06) 2017 916

IPS WEEKLY SOLAR AND GEOPHYSICAL REPORT
(04 AUGUST - 10 AUGUST)

ISSUED ON 11 AUGUST 1995

SUMMARY

DATE	04	05	06	07	08	09	10
10CM	73	75	75	74	74	73	73
A	6	6	5	9	16	20	(12)
T	21	31	28	30	33	32	38

SOLAR ACTIVITY WAS LOW ALL WEEK.

THE GEOMAGNETIC FIELD AT LEARMONTH W.A. WAS QUIET 4TH TO 6TH AUGUST, QUIET TO UNSETTLED 7TH TO 10TH, WITH A BRIEF ACTIVE PERIOD ON 9TH.

IONOSPHERIC F2 CRITICAL FREQUENCIES WERE NEAR NORMAL DURING LOCAL DAY 4TH TO 9TH AUGUST, AND ENHANCED DURING LOCAL NIGHT BY 15 TO 30 PER CENT 4TH TO 7TH, AND 9TH, AND ENHANCED TO 50 PER CENT DURING LOCAL NIGHT ON 8TH. FREQUENCIES WERE ENHANCED 15 TO 40 PER CENT ON 10TH. SPREAD F WAS OBSERVED DURING LOCAL NIGHT ON 4TH TO 7TH AUGUST, WITH OCCASIONAL SPORADIC E ON LAYER AT NIGHT ON 5TH.

FORECAST
(11 AUGUST - 17 AUGUST)

SOLAR: VERY LOW

GEOMAGNETIC: QUIET TO UNSETTLED, WITH POSSIBLE ACTIVE PERIODS 12-14 AUGUST.

IONOSPHERIC: NEAR PREDICTED MONTHLY VALUES

COURTESY OF IPS AND SPACE SERVICES

RTDX0804 RTTY DX

VK2SG RTTY DX NOTES FOR WEEK ENDING 4 AUG 1995 (BID RTDX0804)

Our thanks this week go to DJ3IW and the Central Euope DX Cluster DB0SPC, I5FLN and the IK5PWJ Packetcluster, JF1MGI, JH1ROJ, JH2PDS/1, JR2BNF/1, KB2HK, N2VYU, OH2BUA, SM5EIT, VE3CDX, WB2CJL, W5KSI, W57I, Z5SS and the NJ0M node of the Minnesota DX Packetcluster Network. Thanks to all for your information.

BANDPASS: (Signals are 45.5 baud unless noted.)

Friday 28

0154-14081 HP1BXH
1044-24923 3W5FM
1048-18103 3W5FM
1535-14083 YL1ZE
1925-14084 RU3AT
1928-14083 8P6SA
1948-14081 SM0EUI
2016-14087 UT2IZ
2021-14085 KP2/N9NCX
2024-14083 UR5EDU
2108-14079 TI2Y0
2112-14084 YL1ZE
2132-14081 KW2P/CY9
2141-14080 TI2Y0
2231-14083 XE3ARV
2237-14086 VP5JM
2247-14069 TI2UU Pactor
2254-14084 EI2GS

Saturday 29

0104-14083 KW2P/CY9
0718-14084 HS1WLF
0719-14084 AH6HH
0803-14069 VK3CW Pactor
0937-14085 KH0/JA2BY
1038-14085 N2PQE/KH0
1045-14085 KH0/JA2ANA
1314-14085 3W5FM
1547-14084 YL1ZE
1640-14073 VQ9SS Pactor
1749-14086 YL1EE
1753-14085 TM7XX
2024-14087 D3T
2054-14083 XE3ARV
2134-14085 3Z0RY
2146-14083 D3T
2204-14087 VK2KM
2211-14084 CX7BF
2212-14084 OE5EGN
2228-14088 SV8CS
2236-14088 UR5EDU
2251-14083 S58AA
2320-14088 IS/I0ER
2323-14087 EA5EZM
2338-14085 OK2EQ

Sunday 30

0014-14084 OE5EGN
0017-14086 SV2BXZ
0348-14087 AL70C
0505-14087 VK3JW
0753-14084 KH0/JA2BY
0835-14084 N2PQE/KN0
1207-14085 HI8BG
1229-14082 KH0/JA2BY
1239-14080 KW2P/CY9
1243-14087 JP1SYV
1248-14081 3V8BB QSL via JF2EZA
1325-14083 3W5FM New QSL route: Box 66, Vladimir, 600011
Russia
1330-14084 KW2P/CY9

1332-14087 UN5PR
1408-14083 3V8BB
1414-14083 D3T
2057-14085 D3T
2059-14090 F8RZ
2108-14084 KP2/N9NCX
2109-14087 EA7EL
2128-14081 N2PQE/KH0
2148-14087 S01M
2158-14085 VK2KM
2210-14087 OK1DX
2016-14087 UT2IZ
2021-14085 KP2/N9NCX
2024-14083 UR5EDU
2108-14079 TI2Y0
2112-14084 YL1ZE
2132-14081 KW2P/CY9
2141-14080 TI2Y0
2231-14083 XE3ARV
2237-14086 VP5JM
2247-14069 TI2UU Pactor
2254-14084 EI2GS

Saturday 29

0104-14083 KW2P/CY9
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1547-14084 YL1ZE
1640-14073 VQ9SS Pactor
1749-14086 YL1EE
1753-14085 TM7XX
2024-14087 D3T
2054-14083 XE3ARV
2134-14085 3Z0RY
2146-14083 D3T
2223-14091 EA8RA
2224-14087 XE3ARV
2248-14084 WP4ISP
2250-14082 YV1AVQ
2253-14086 PP7FB
2323-14082 AZ7FAF
2335-14087 F5DAN
2344-14089 KP4VP
2354-14082 WL7EF

Monday 31

0011-14082 HK3BZ0
0013-14088 VP2VBL
0013-14086 PP7FB
1213-14085 9M8BT
0230-14087 KP4VP
1228-14086 4S7/JA4FM
1229-14080 9M8BT
1517-14082 UN5PR
1527-14089 A71CW
1551-14083 4S7/JA4FM
1715-14086 4S7/JA4FM
1951-14085 D3T

2004-14091 4X/OK1JR
2012-14086 KP2/N9NFM
2045-14085 KP2/N9NCX
2100-14090 A61AD QSL WB2DND
2138-14087 EA3E00
2203-14080 KW2P/CY9
2249-14089 N9NCX/KP2
2300-14090 S58AA

Tuesday 1

0719-21085 XY1HT
1255-14083 9M8BT
1317-14081 KW2P/CY9
1341-14081 OZ1CQX
1351-14081 KW2P/CY9
1425-18105 A61AD
1500-14085 4L1BR
1715-21086 XY1HT
1746-14089 GM0SZQ
2016-14089-SV8CS
2100-14090 A61AD
2204-14087 EA8ACM
2250-14082 CU3CZ

Wednesday 2

0018-14083 VE8RCS Zone 2
0346-14085 KP4VP
1146-14087 KP2/N9CNX
1158-14084 4S7AVR
1220-14084 9M8BT
1341-14084 7N1QDV QSL via CBA
1446-14087 5Z4FM
1545-14084 4L1BR

Thursday 3

1157-14085 GW3EHN
1311-14084 YL1ZE

Notes of Interest:

COCOS Is, TI9 - TI2JJP was to have been active on RTTY as TI9JJP during the first half of August but there have been no reports to date.

The first award in the '95 IN 1995' contest sponsored by the International Digital Radio Association (IDRA) goes to OZ5MJ. He worked 95 digital DXCC countries by 21 May 1995. His counters included such nice ones as A4, C0, J6, JW, OD, SV9, TY, TN and an assortment of VP8's. You can still receive an attractive certificate for this contest. See the Digital Journal, Dec. 1994, p. 25 for details.

The VK2SG RTTY DX NOTES are also available on Internet via Tel-net or FTP at ab6z.ampr.org,

at reflectors dxatve7tcp.ampr.org, and digital-dxatst.rim.or.jp

See also the OH2BUA WebCluster at URL

<http://www.clinet.fi/~jukka/rtty.html>

For next week's bulletin, send your bandpass and notes of interest to Luciano, I5FLN at ZS5S.ZAF.AF

73 es good hunting de Jules W2JGR at W5KSI.#NOLA.LA.NOAM
Internet: w2jgratmillcomm.com

Ohio/Penn DX Bulletin No. 216

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, AD1C, N2MIP, WB3LUI, K8YSE, N8HTT, K9AJ, KG9N, K0EU, 4X6TT, DF4RD, F5JYD, G3NUG, G4BUE & DXNS, HP2CWB, HS1NIV/5, JF1MGI, JH2PDS/1, OK1ADM and DL9G0A & DX News Letter for the following DX information.

3W, VIETNAM. Nickolay, 3W5FM, continues to be active on CW/SSB/RTTY mainly on 20 meters between 1000 and 1400z, but JA sources report RTTY activities on 24923 kHz at 1044z and on 18103 kHz at 1050z. He will be there until September, or October if possible.

C6A, BAHAMAS. Chuck, KG9N, will be operating as KG9N/C6A from Abaco Island, August 11-18th. He plans to be active on RS-12 and participate in the WAE CW Contest.

CENTRAL AMERICA DXPEDITION. Ulis, WB3LUI will be active from El Salvador and Costa Rica. He will be active mostly on the lower bands 40 and 80 meters, and possibly the higher bands if MUF permits. Activity will be mostly CW. From August 12-20th, Ulis will be in El Salvador signing YS4/TI5NW and from August 20-27th, in Costa Rica signing TI5NW. QSL via the CBA of WB3LUI.

THIRD CANADIAN IOTA TOUR. Bruno, F5JYD, announced that F5SSM and himself will be active for the third time in CANADA (VE7), August 11-26th. They will be active from different islands for IOTA & C.IS.A awards. Activity will be on all bands (including the WARC bands). QSL via F5JYD.

TI9, COCOS ISLAND. Jose, TI9JJP, will be active until August 15th. If you miss him on this trip, you have a second chance to work him between October 4th and 20th. Look for him on 7050 kHz between 0200 and 0530z. Also check 14195 kHz at various times throughout the day.

VK9C, COCOS ISLAND. Uwe, DJ9HX, who was active this past week as VK9XI from Christmas Island, has moved on to Cocos Island signing VK9CJ. His activity should last until August 16.

XY, MYANMAR (BURMA). Reports state that a group of Japanese operators and Ray, HS0/G0NOM were active as XY1HT for a few days last week to demonstrate SSTV and RTTY to government officials.

Excerpts and distribution of The OPDX Bulletin are granted as long as KB8NW/OPDX/BARF80 receive credit.

COMING EVENTS

AUGUST	19th-20th	SARTG WW RTTY CONTEST
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SEPTEMBER

3RD

DARC CRORONA 10M DIGI

Society information

The Society may be contacted at : P0 Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President(Col) VK2CTD at VK2XSB, or the Secretary (Pat) VK2JPA at VK2AAB.

News items may be sent to Broadcast Officer P0 Box 60 Blacktown 2148 Australia, or by packet to VK2JPA at VK2AAB. Email address for the Broadcast Officer is :

patl(at)pitt.conmusic.su.oz.au

The Society welcomes news items on any digital subjects from anywhere in the broadcast coverage area. We are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

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Opinions expressed are mine. | D8 15 71 F9 26 C8 63 40 5E 63 5C 65 FC A0 22 99